



Chainsaw Safety Best Management Practices

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Many forest owners will use a chainsaw at some point to clear trails, collect firewood, or thin their woods for improvement and growth of the residual trees. Chainsaws are important tools, but can be especially dangerous if improperly used. Chainsaw operators should be in good physical condition, have properly functioning equipment, appropriate personal protective equipment and know which cutting techniques to use for a given situation. Following are some BMPs (Best Management Practices) to help ensure you are safe and productive with your saw.

1. **Be where you are.** Accidents with chainsaws happen in a split second, but those accidents often result from existing circumstances. Be alert to your existing circumstances of person, place and equipment. Through complete attention to your activity, that being the safe operation of the chainsaw, you can greatly reduce your potential for injury or death. Think only about what you are doing, how you are doing it, your personal ability, and the current conditions. If your mind starts to wander, stop running the saw.
2. **Participate in an approved safety and productivity course before using your saw.** Good courses will last several hours. Some courses with advanced instruction will require several days, but are worth the investment. Some chainsaw dealers provide limited instruction. Nationally, a course known as Game of Logging for Landowners provides comprehensive technical training for landowners on felling and saw maintenance. In NY, these courses are sponsored through Cornell University's ForestConnect and NYFOA.
3. **Always wear appropriate personal protective equipment.** Minimally, equipment includes: a hardhat, eye protection, hearing protection, cut-resistant chaps or pants, and sturdy boots.
4. **Identify hazards in and near the tree you plan to cut.** Look for dead branches, hanging branches, standing snags, saplings in the path of the falling tree, and other structures that might impede the falling tree. Remove hazards if possible. If hazards cannot be managed, pick a different tree to cut. Evaluate snags within one tree height of your location and cut those you deem of high risk.

5. **Determine the back or side lean of the tree relative to the direction the tree will fall.** Look into the crown of the tree you will cut and determine where the majority of weight is located. Consider branches that extend to the side which add weight. Special techniques, available in training courses, are necessary to fell a tree against the natural lean. Avoid using ropes, chains and tractors to pull a tree against the lean.
6. **Identify and clear an escape path.** When the tree starts to fall, you need to be at least 15 feet away from the stump and at a 45 degree angle from the direction of the fall. Take time before felling to clear any obstacle that might block your path. Do not stand near the stump of a falling tree. After the tree falls, look for falling branches and trees before moving to the next tree.
7. **Determine the length and thickness of the hinge.** A correctly felled tree depends on the hinge wood to determine the direction of travel. Based on what you learned in an approved felling course, measure the tree to determine the length and thickness of the hinge. Be careful not to cut your hinge.
8. **Determine the final cuts.** Know where you will stand and how you will execute your final cut. If using wedges, how many will you need and where will you place them. Make a final check on safety and others before releasing the tree to fall.
9. **Maintain your equipment.** Assess the operability of your saw and safety equipment at the beginning and end of each day. Keep your chain teeth sharp, the chain appropriately tight, and the engine running smoothly. Make adjustments to equipment as necessary during the day. Replace broken safety equipment. Improperly function equipment can cause increased fatigue and greater chances for injury.
10. **Stop before you get tired.** Know the limitations of your physical endurance. If you stop before you get tired, you will be around tomorrow to cut the tree that will be where you left it.